CLAIMS:

1. A polymer composition for use at least in surface coating applications and in fabrication of rigid foams with load bearing capacity comprising a base molecule, a linker molecule and at least one initiator compound, said base molecule having at least two differing functionalities, and said linker molecule having a functionality reactive with at least one of said functionalities of said base molecule, the first of said at least two functionalities of said base molecule enabling a first curing stage of said polymer composition by reaction with the functionality of said linker molecule, and the second and any further functionality of said base molecule enabling second and optionally further curing stages of said polymer composition, said first, second and any further curing stages being capable of activation simultaneously or independently of each other as required.

2. A polymer composition as claimed in Claim 1 which is biodegradable.

3. A polymer composition as claimed in Claim 1 which is biostable.

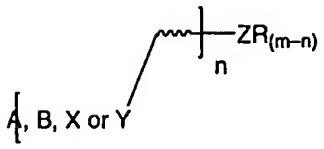
4. A polymer composition as claimed in any one of Claims 1-3 wherein the base molecule and the linker molecule are, independently of each other, a single organic molecule.

5. A polymer composition as claimed in any one of Claims 1-3 wherein the base molecule and the linker molecule are, independently of each other, an oligomer formed from two or more substrate monomers.

6. A polymer composition as claimed in Claim 5 wherein the base molecule and linker molecule independently of each other, have a molecular weight of less than 2000, preferably less than 1000 and more preferably less than 500.

7. A polymer composition as claimed in any one of Claims 1-6 wherein the base molecule is of the formula 1:

(a)



n = 1 to m
m = valancy of Z

I

wherein:

^^^ is one or more repeating units, N & M, are integers, A and B are unsaturated moieties, Z is H, C, O, N, Si or S and the remaining variables are defined as follows:

Atom (Z)	Valancy (m)	n (arms)	R	ZR(m-n)
C	4	1	H, CH_3, C_2H_5 or OR	CH_3, $C(CH_3)_3$, $C(C_2H_5)_3$, $C(OR)_3$
		2	H, CH_3, C_2H_5 or OR	CH_2, $C(CH_3)_2$, $C(C_2H_5)_2$, $C(OR)_2$
		3	H, CH_3, C_2H_5 or OR	CH, $C(CH_3)$, $C(C_2H_5)$, C(OR)
		4	none	C (4 arms)
O	2	1	H, CH_3, C_2H_5 or OR	OH, $O(CH_3)$, $O(C_2H_5)$, R cannot be OR
		2	none	O
Si	4	1	H, CH_3, C_2H_5 or OR	SiH_3, $Si(CH_3)_3$, $Si(C_2H_5)_3$, $Si(OR)_3$
		2	H, CH_3, C_2H_5 or OR	SiH_2, $Si(CH_3)_2$, $Si(C_2H_5)_2$, $Si(OR)_2$
		3	H, CH_3, C_2H_5 or OR	SiH, $Si(CH_3)$, $Si(C_2H_5)$, Si(OR)
		4	none	Si (4 arms)
H	1	1	none	H (R=0)

8. A polymer composition as claimed in any one of claims 1-6 wherein the base molecule is of the formula II:

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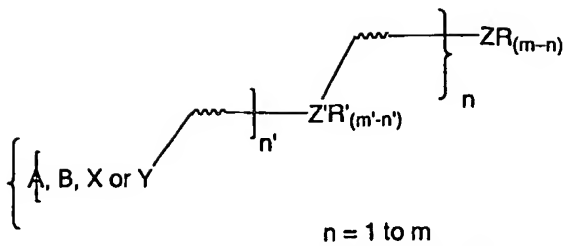
(b)



II

n = 1 to m
m = valancy of Z
n' = 1 to (m'-1)
m' = valancy of Z'

wherein:

~~~ is one or more repeating units, N, M, N^1 and M^1 are integers, A and B are unsaturated moieties, Z is H, C, O, N, Si, S and Z^1 is H, C, O, N, Si, S and the remaining variables are defined as follows:

Atom (Z)	Valancy (m)	n (arms)	R	ZR(m-n)
C	4	1	H, CH_3, C_2H_5 or OR	CH_3, $C(CH_3)_3$, $C(C_2H_5)_3$, $C(OR)_3$
		2	H, CH_3, C_2H_5 or OR	CH_2, $C(CH_3)_2$, $C(C_2H_5)_2$, $C(OR)_2$
		3	H, CH_3, C_2H_5 or OR	CH, $C(CH_3)$, $C(C_2H_5)$, C(OR)
		4	none	C (4 arms)
O	2	1	H, CH_3, C_2H_5 or OR	OH, $O(CH_3)$, $O(C_2H_5)$, R cannot be OR
		2	none	O
Si	4	1	H, CH_3, C_2H_5 or OR	SiH_3, $Si(CH_3)_3$, $Si(C_2H_5)_3$, $Si(OR)_3$
		2	H, CH_3, C_2H_5 or OR	SiH_2, $Si(CH_3)_2$, $Si(C_2H_5)_2$, $Si(OR)_2$
		3	H, CH_3, C_2H_5 or OR	SiH, $Si(CH_3)$, $Si(C_2H_5)$, Si(OR)
		4	none	Si (4 arms)
H	1	1	none	H (R=0)
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Atom (Z')	Valancy (m')	n' (arms)	R'	Z'R'(m'-n')
C	4	1	H, CH_3, C_2H_5 or OR	CH_2, $C(CH_3)_2$, $C(C_2H_5)_2$, $C(OR)_2$
		2	H, CH_3, C_2H_5 or OR	CH, $C(CH_3)$, $C(C_2H_5)$, C(OR)
		3	none	C (4 arms)
O	2	1	none	O
Si	4	1	H, CH_3, C_2H_5 or OR	SiH_2, $Si(CH_3)_2$, $Si(C_2H_5)_2$, $Si(OR)_2$
		2	H, CH_3, C_2H_5 or OR	SiH, $Si(CH_3)$, $Si(C_2H_5)$, Si(OR)
		3	none	Si (4 arms)
H	1	0	cannot have a group or atom	

9. A polymer composition as claimed in any one of Claims 1-8 additionally comprising one or more of the group consisting of radical inhibitor, sensitizer, promoter, dispersant, porogen, catalyst, pigment and surfactant.

10. A prepolymer composition for use at least in surface coating and adhesive applications and in the fabrication of rigid foams with load bearing capacity, comprising the reaction product of a base molecule, a linker molecule and at least one initiator compound, said base molecule having at least two differing functionalities, and said linker molecule having a functionality reactive with at least one of said functionalities of said base molecule, said reaction product being the result of a first curing stage wherein the first of said at least two functionalities of said base molecule reacts with the functionality of said linker molecule to form said prepolymer composition.

11. A cured polymeric end product for use at least in surface coating and adhesive applications and in the fabrication of rigid foams with load bearing capacity, comprising the reaction product of a base molecule, a linker molecule and at least one initiator compound, said base molecule having at least two differing functionalities, and said linker molecule having a functionality reactive with at least one of said functionalities of said base molecule, said end product being the result of a first curing stage wherein the first of said at least two functionalities of said base molecule reacts with the functionality of said linker molecule and a second curing stage and optionally further curing stages wherein

said initiator compound is activated to affect free radical polymerisation of at least said second functionality of said base molecule.

12. Use of a polymer composition according to any one of Claims 1-9, a prepolymer composition according to Claim 10 or cured end product according to Claim 11 in the preparation of a surface coating.

13. Use of a polymer composition according to any of Claims 1-9, a prepolymer composition according to Claim 10 or cured end product according to Claim 11 in the preparation of a rigid foam with load bearing capacity.

14. Use of a polymer composition according to any one of Claims 1-9, a prepolymer composition according to Claim 10 or cured end product according to Claim 11 in the preparation of an adhesive composition.